July 23, 2004

David Smith, TMDL Team Leader
US EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: 303d list amendments

Dear Mr. Smith,

The American Samoa Environmental Protection Agency has revised its CALM Assessment Category assignments reported in the 2004 Territory of American Samoa Integrated Water Quality Monitoring and Assessment Report. As you requested, the agency has provided copies of all designated use support summary sheets (enclosed). In addition, per your discussions with my staff, we have updated the CALM Assessment summary table and provided you with summaries of the primary pollutants for listed watersheds. Lastly, we have provided a prioritized list of potential TMDLs.

To guide you through our revisions, we have provided a brief narrative description of changes in our assessments and/or our rationale for maintaining determinations as they were in our original submission. For clarity, these are arranged by waterbody type and designated use, followed by the summary sheet.

Streams
Aquatic Life Use Support

With respect to Aquatic Life Use Support, streams from 7 Tutuila watersheds (2, 20, 21, 24, 25, 26, and 27) were classified as Partially or Not Supporting. The pollutants that violated the American Samoa Water Quality Standards (ASWQS) were total nitrogen (TN), total phosphorus (TP), turbidity, and low dissolved oxygen (DO). In three instances (watersheds 2, 24, and 27) habitat modification was also a further reason for listing these streams as impaired. Sources of these pollutants include faulty septic tanks, cesspools, illegal piggeries, and improperly cleared agricultural plots. Originally the agency had given these watersheds a CALM listing of 4b, based on the rationale that our Nonpoint Source Pollution Program was designed to alleviate these pollutant sources and would be sufficient to address the major causes of water quality impairment. However, after

discussions with you, ASEPA formally amends the CALM designation to 5 for each of these watersheds.

The results and designated use assessment for one particular watershed must be discussed separately. The major stream in watershed 22 consistently violated the Territory's standard for TP, but extensive work in this watershed failed to reveal any significant anthropogenic sources of phosphorus. Instead, it is likely that TP is naturally elevated in this stream. The ASWQS provide for situations like this: "In situations where the natural conditions exceed a standard given in §24.0206, the natural water quality shall constitute the applicable standard." (ASCA §24.0210(b)(2)). Based on our professional assessment, the stream in this watershed was given a CALM category 2.

Drinking Water

Five watersheds (2, 4, 10, 11, and 16) were classified as Not Supporting based on Drinking Water designated use. These watersheds were placed in CALM Category 4b (except watershed 2, which was given a CALM listing of 5 based on the aquatic life use support—see above), because those village drinking water systems are under USEPA Administrative Order to be replaced with treated water from American Samoa Power Authority Public Water Systems within 2 years. Furthermore, the American Samoa Water Quality Standards do not list Drinking Water as a designated use for these streams.

Ocean Shoreline

Aquatic Life Use Support

With respect to this designated use, all watersheds for which we have data were found to be either Fully Supporting or Threatened for this designated use. There were no changes to this section of the original submission.

Swimming

My staff noticed an error in our previous submission. Watersheds 32 and 33 were originally given a Partially Supporting designation, but this was incorrect. These watersheds should have received a Fully Supporting designation, and our updated submission has listed them as such.

The ocean shoreline was found to be Partially or Not Supporting for swimming in watersheds 23, 24, 25, 26, and 27. This was based on intensive weekly monitoring at local beaches of the indicator bacteria *Enterococcus*. We initially placed these watersheds in CALM category 4b for two reasons. First, there are many questions concerning the reliability of the *Enterococcus* indicator for tropical water quality. Second, the agency argued that the Nonpoint Source Pollution Program was designed to alleviate potential pollutant sources and would be sufficient to address the major causes of water quality impairment. However, after discussions with you, ASEPA formally amends the CALM designation to 5 for each of these watersheds.

Other watersheds (8, 10, 12, 14, 15, 19, 21, 30, 32, 33, 34, 36, 38, and 40) were given a CALM category of either 2 or 3. The beaches in these watersheds were sampled at a lower frequency (either monthly or quarterly) than beaches in the central harbor region. The sparse data for these sites precludes my staff from confidently assigning a CALM assessment category for these watersheds; the data we have are inadequate to assess with confidence the status of these waterbodies. The agency is currently re-evaluating its monitoring strategy for these beaches. However, ASEPA included these use support determinations in this summary table to assist with our local tracking efforts.

Watershed 22 was classified Not Supporting for the swimming designated use. The large stream draining into the nearshore marine habitat appears to be a significant source of *Enterococcus* bacteria to that habitat, but those elevated bacterial levels are not attributable to any known anthropogenic source(s). This appears to represent a natural or background condition. Consequently, ASEPA placed this watershed in CALM category 3.

Fish Consumption

Lastly, only the Pago Pago Harbor area (watershed 24) failed to meet its designated use for fish consumption. Contaminants prohibiting fish consumption include PCBs and metals (arsenic and mercury). This is in part why this watershed received a CALM category 5, and the agency has placed this watershed on the 303d list with high priority for developing a TMDL for fish consumption.

Wetland

The data that were used to determine designated use support for wetlands were all evaluated data. While some of these waterbodies were deemed Partially Supporting for various designated uses, the agency placed all wetlands in CALM category 3. The evaluated data were simply not enough to merit a stronger determination.

303d list submission

ASEPA submits for US EPA's approval a new amended list of 303d waters (see appended table). For ocean shorelines, watershed 24 is impaired for fish consumption, and this is the agency's highest priority for TMDL development. Other watersheds with impaired waters with respect to swimming include watersheds 23, 24, 25, 26, and 27. The reason for impairment is bacterial indicators (*Enterococcus*). For streams, ASEPA submits watersheds 2, 20, 21, 24, 25, 26, and 27 for the impaired waters list. For streams in these watersheds, the pollutants that violated the ASWQS were total nitrogen, total phosphorus, turbidity, and dissolved oxygen.

Other than watershed 24 and the fish consumption advisory, ASEPA requests that these watersheds be considered low priority for TMDL development for two reasons. First, our NOAA/EPA-approved 6217/319 Nonpoint Source Pollution Prevention Program is designed to address the pollutants and conditions that lead to water impairment. ASEPA's initial implementation of this program has demonstrated some significant

improvements in individual waterbodies, and through full implementation we expect considerable improvement in local water quality and designated use assessment. Second, my staff continues to question the appropriateness of the *Enterococcus* indicator. This end point may not be a sufficient indicator of tropical water quality, and we are currently investigating other potential indicators and will revise our bacterial water quality standards to a more discriminating one prior to TMDL development.

Conclusions

This letter has outlined the American Samoa Environmental Protection Agency's revisions to the 2004 Territory of American Samoa Integrated Water Quality Monitoring and Assessment Report. The agency has identified a list of impaired waters within the Territory. The fish consumption advisory for the Pago Pago Harbor watershed has received our highest priority for TMDL development. Other impaired waters should be considered low priority for TMDLs at this time.

Thank you for your help in addressing this matter. Please do not hesitate to contact me if you have further questions or concerns.

Very truly yours,

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Peter Peshut, Acting Director

Category 5 Waters (303(d)) High Priority List

Waterbody Type	Watershed Number	Pollutant
Ocean Shoreline	24	PCBs, metals (arsenic, mercury)

Category 5 Waters (303(d)) Low Priority List

Waterbody Type	Watershed Number	Pollutant
Streams	2	TN, TP, turbidity
	20	TN, TP, turbidity, DO
	21	TN, TP, turbidity, DO
	24	TN, TP, turbidity, DO
	25	TN, TP, turbidity
	26	TN, TP, turbidity, DO
	27	TN, TP, turbidity
Ocean Shoreline	23	Bacterial indicators (*Enterococcus*)
	24	Bacterial indicators (*Enterococcus*)
	25	Bacterial indicators (*Enterococcus*)
	26	Bacterial indicators (*Enterococcus*)
	27	Bacterial indicators (*Enterococcus*)